

EPA Region 5 Records Ctr.



357439

**FOCUSED SITE INSPECTION PRIORITIZATION
SITE EVALUATION REPORT**

**NORTH SHORE MATERIALS, INC.
2500 COMMONWEALTH AVENUE
NORTH CHICAGO, ILLINOIS**

CERCLIS ID NO.: ILD064006414

Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SITE ASSESSMENT SECTION
77 West Jackson Boulevard
Chicago, Illinois 60604**

Date Prepared: August 4, 1995
U.S. EPA Region: 5
Contract No.: 68-W0-0037
Technical Direction Document No.: T05-9503-215
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International Specialists in the Environment

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1. INTRODUCTION

The Ecology and Environment, Inc. (E & E), Technical Assistance Team (TAT) was assigned by the United States Environmental Protection Agency (U.S. EPA), under Contract No. 68-W0-0037, Technical Direction Document (TDD) No. T05-9503-215, to evaluate the North Shore Materials, Inc., site in North Chicago, Lake County, Illinois as a potential candidate for the National Priorities List (NPL). E & E performed Focused Site Inspection Prioritization (FSIP) activities to determine whether, or to what extent, the site poses a threat to human health and the environment, and has prepared this FSIP report. The report presents the results of E & E's evaluation and summarizes the site conditions and targets pertinent to the migration and exposure pathways associated with the site. Background information was obtained from a Preliminary Assessment (PA) report (Illinois Environmental Protection Agency [IEPA] 1986) and a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Screening Site Inspection (SSI) report (E & E 1987).

This report is organized into six sections, including this introduction. Section 2 describes the site and provides a brief site history. Section 3 provides information about previous investigations conducted at the site. Section 4 provides information about the four migration and exposure pathways (groundwater migration, surface water migration, soil exposure, and air migration). Section 5 summarizes site conditions. References used in the preparation of this report are listed in Section 6.

2. SITE DESCRIPTION AND HISTORY

The North Shore Materials, Inc., site is located at 2500 Commonwealth Avenue in North Chicago, Lake County, Illinois (sec. 5, T. 44 N., R. 12 E.). The coordinates for the site are at latitude 42°19'00" North and longitude 87°50'45" West (E & E 1987). North Shore Materials, Inc., operated for 20 years from 1973 to 1993 as a bulk manufacturer of polyvinyl chloride (PVC) coating used in coating electrical wiring and cable. In 1993, North Shore Materials, Inc., ceased operations, all the equipment was sold, and the facility was left and is currently vacant (Davis 1995).

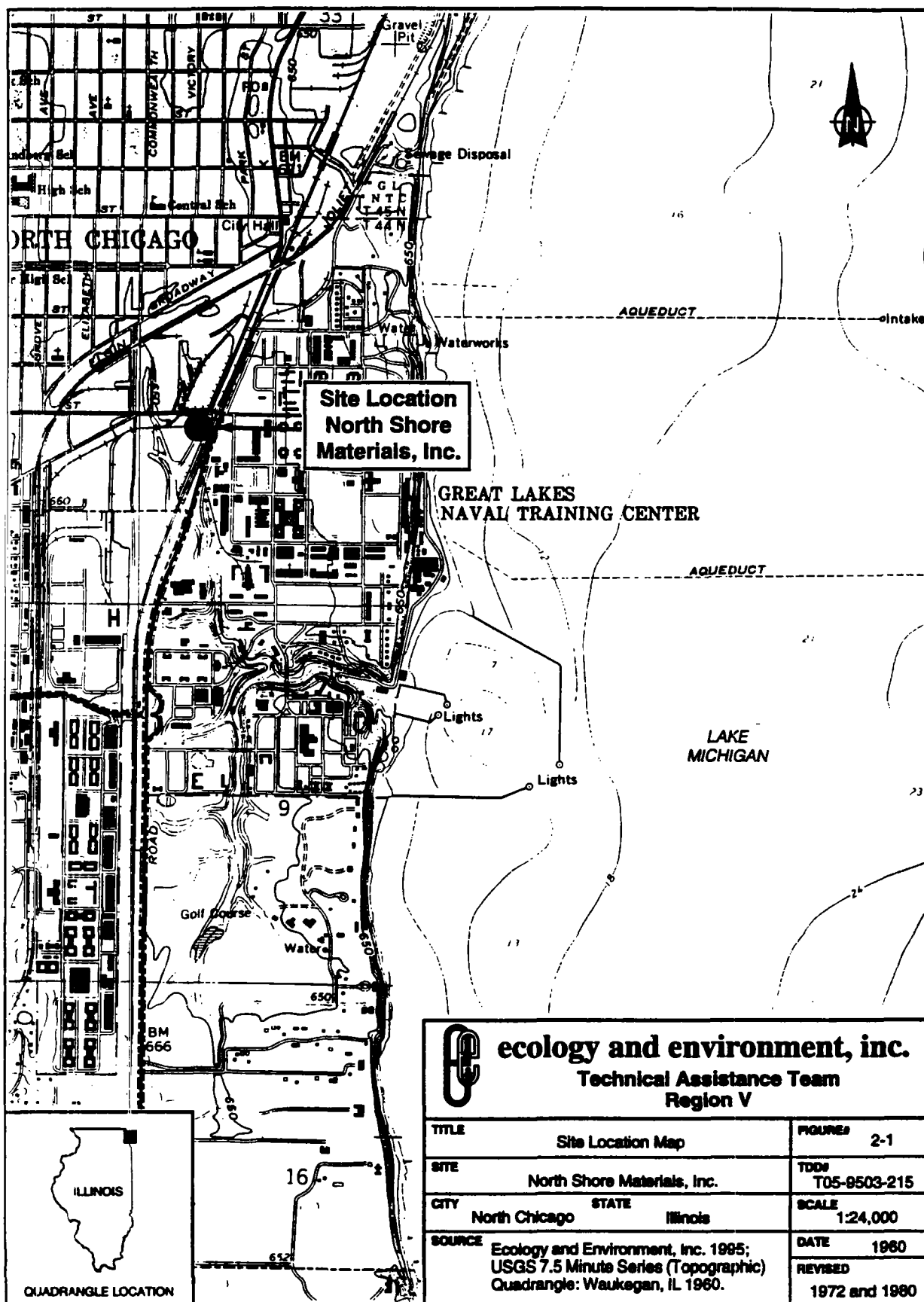
The site is situated in an industrialized area of North Chicago surrounded by warehouse complexes and a railroad yard to the south and west. The Great Lakes Naval Training Center is located just east of the site. Other land uses outside a one-mile radius of the site include residential neighborhoods to the west and north, with an approximate population of 35,000 (E & E 1987). The site location is shown on Figure 2-1.

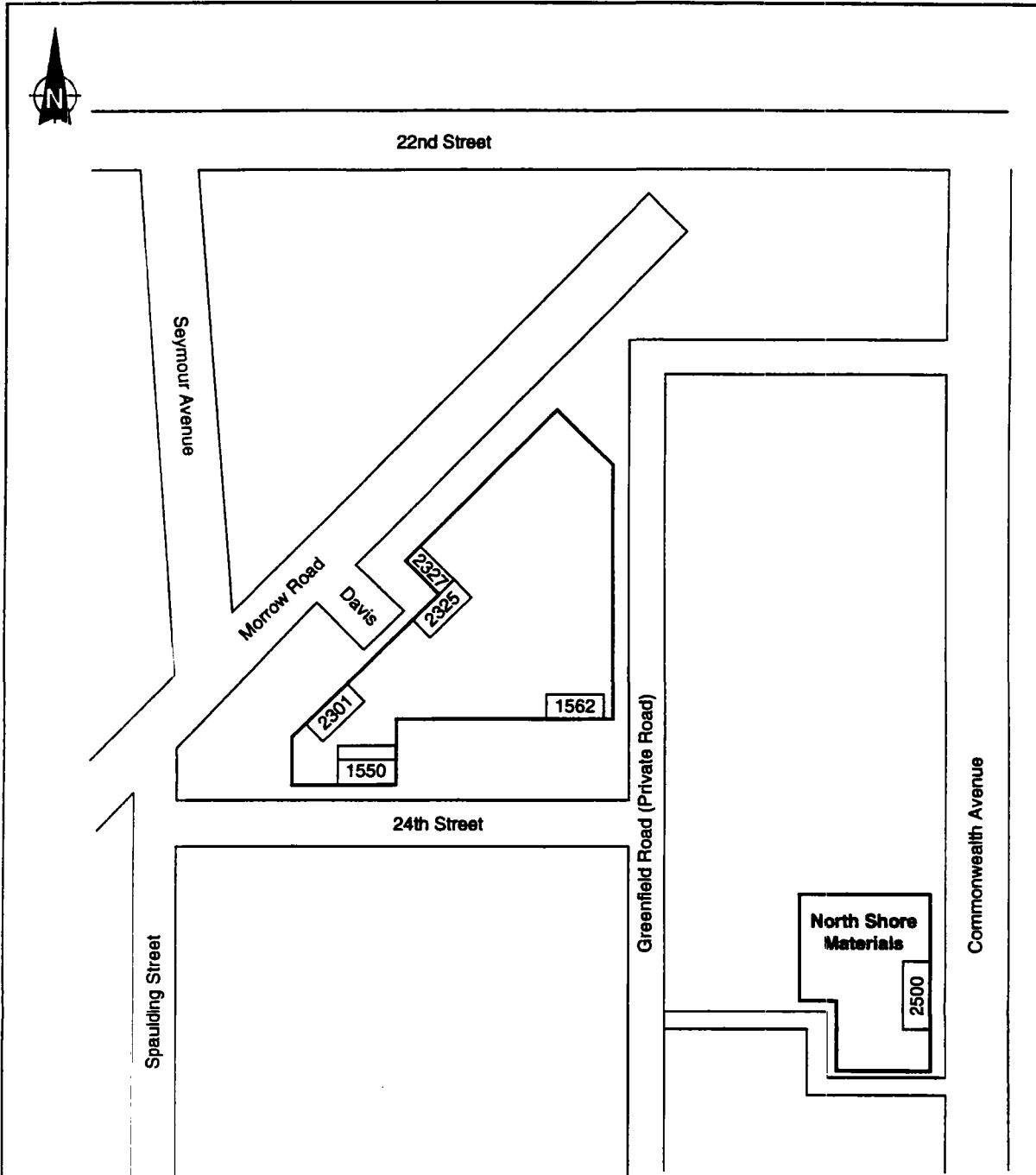
The site is situated on approximately 2.0 acres of land. Site features are shown in Figure 2-2. Lake Michigan is the nearest surface water body, which at its nearest point, is located approximately 0.75 miles east of the site. The topography surrounding the site is flat, consisting mostly of industrial warehouse complexes.

North Shore Materials, Inc., a manufacturing division of Coleman Cable Systems, Inc., began operation in 1973, as a manufacturer of PVC used in coating electrical wiring and cable. This process involved using PVC resin in a polymer form, along with plasticizers and stabilizers, then running this material through an extrusion process (raising temperature) to form PVC pellets. In turn, these pellets were used to coat wire and cable. The material was manufactured mostly in bulk quantities, though some finished products were made at the site.

In 1993, the company ceased operations and all equipment was sold. Prior to 1973, it is reported that the entire area was used as an iron foundry (E & E 1987).

During 20 years of operation, no records indicating spills or releases of hazardous waste were documented at the North Shore Materials, Inc., site. During the 1987 SSI, a site representative stated that in 1984 there reportedly was a plasticizer spill that drained into the storm sewer (E & E 1987). No Resource Conservation and Recovery Act (RCRA) or National Pollutant Discharge Elimination System (NPDES) permits have been identified. No CERCLA hazardous substances are known or suspected to have ever been present at this site, and no environmental samples have been collected and analyzed for hazardous substances.





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Technical Assistance Team
Region V

| | | |
|---|-------------------|-----------------------|
| TITLE Site Features Map | | FIGURE# 2-2 |
| SITE North Shore Materials, Inc. | | TDD# T05-9503-215 |
| CITY North Chicago | STATE Illinois | SCALE Not to Scale |
| SOURCE Ecology and Environment, Inc. FIT 1987 SSI | | DATE 1987 |
| | | REVISED 1995 |

3. PREVIOUS INVESTIGATIONS

The site was initially included on the "Eckhart Report" of potential hazardous waste sites listed by the U.S. Congress in 1979. In 1980, a U.S. EPA Preliminary Assessment Form T2070-2 was completed for the North Shore Materials, Inc., site by E & E, a U.S. EPA Field Investigation Team (FIT) contractor. Based on limited data gathered, this site was assigned a low priority. On April 29, 1986, the IEPA conducted a PA of the North Shore Materials, Inc., facility. The IEPA report stated that inside the warehouse, drums of unknown contents were stacked in the middle of the floor, and boxes of plastics were stacked along the walls and outside in a drum storage yard in the parking lot (IEPA 1986). No follow-up action was taken by the IEPA regarding the contents of the drums.

On May 7, 1987, a CERCLA SSI was conducted by E & E FIT which included an on-site investigation and an interview with a site representative of North Shore Materials, Inc. Photographs were taken and visual observations of the site were made. No sampling was conducted during this investigation. The site representative stated that in 1984 a spill occurred in which plasticizer drained into the sewer system (E & E 1987). However, no records were filed regarding this incident or any other spills at North Shore Materials, Inc., facility. During the 1987 SSI, no drums were identified on site as reported during the IEPA PA in 1986. The SSI report stated that no hazardous waste was stored, treated, or disposed of on site (E & E 1987).

4. MIGRATION AND EXPOSURE PATHWAYS

This section describes the four migration and exposure pathways associated with the North Shore Materials, Inc., site. Section 4.1 discusses the groundwater migration pathway; Section 4.2 discusses the surface water migration pathway; Section 4.3 discusses the soil exposure pathway; and Section 4.4 discusses the air migration pathway.

4.1 GROUNDWATER MIGRATION PATHWAY

This section discusses regional geology and soils, groundwater releases, and targets associated with the groundwater migration pathway at the site. No detailed site-specific geological information has been provided for the areas in the vicinity of the North Shore Materials, Inc., site.

4.1.1 Geology and Soils

The geology of the Chicago area is covered by soils deposited by Pleistocene glaciers, generally consisting of a heterogeneous mixture of sand, gravel, and clay. The bedrock in the Chicago area consists of Silurian dolomite which is about 50 to 500 feet thick. The upper part of the Silurian dolomite, the Niagaran, is characterized by randomly disturbed reefs of pure dolomite surrounded by well layered, silty, interreef dolomite. The lower part of the Silurian dolomite, the Alexandrian, is characterized by dolomite units that range from pure argillaceous or cherty. Beneath the Silurian rocks are the Ordovician, Cambrian, and Pre-Cambrian systems. At the top of the Ordovician System are the Maquoketa shales, approximately 210 feet thick, and is considered a confining layer in this region. Below the Maquoketa shales are the Galena-Platteville dolomite, the upper Galena being medium to thick-bedded dolomite with little limestone, and the lower Platteville being somewhat thinner

bedded. The Glenwood-St. Peter sandstone is the next group below the Galena-Platteville dolomite. The Glenwood sandstone contains some shale and dolomite while the St. Peter sandstone is clean and generally more porous and permeable. The lowest rocks of the Ordovician System is made up of the Prairie du Chien group. The Cambrian System consists of Trempealeau-Franconia dolomite, the Ironton-Galesville sandstones, the Eau Claire shales and siltstones, and the Mt. Simon sandstone. No wells have been drilled to the Pre-Cambrian rock in this area. The top of this system is estimated to be from 3,000 to 4,000 feet below ground surface (BGS) in the Chicago area (Willman 1971).

Several formations have been defined as sources of groundwater in the region, the Niagaran-Alexandrian dolomite of the Silurian System and the sandstones and dolomite of the Cambrian and Ordovician Systems (Willman 1971).

The residents of North Chicago obtain drinking water from Lake Michigan. A Lake Michigan intake is located approximately 2 miles northeast of the site. No residents in the area rely on groundwater wells to obtain drinking water. Groundwater usage within a three mile radius of the site is for industrial process only (E & E 1987).

4.1.2 Groundwater Releases

During the 20 years of operation, a release of hazardous substances from the North Shore Materials, Inc., facility to groundwater is unlikely. No evidence of on-site hazardous waste disposal at this site exists or was documented. No groundwater monitoring wells exist at the facility, therefore, no site-specific groundwater releases are documented.

4.1.3 Targets

Residents from North Chicago obtain drinking water from Lake Michigan intakes. There are wells located within a three-mile radius of the site in which the water withdrawn is used for industrial processes only. Pumping information for these wells is not available.

4.2 SURFACE WATER MIGRATION PATHWAY

It is unlikely that a release to surface water has occurred because of the distance from the site to the Lake Michigan (0.75 miles) and the intervening terrain, including railroads and structures, to prevent surface runoff from reaching this water body. There is no direct overland flow from the site and surface water runoff would drain into municipal storm

sewers. The site is not located within a floodplain (E & E 1987). There are no sensitive habitats or wetlands within a 4-mile radius of the site (E & E 1987).

4.3 SOIL EXPOSURE PATHWAY

A release of hazardous substances from the North Shore Materials, Inc., facility to surrounding soils is unlikely since no hazardous wastes were either used, stored, treated, or disposed at this facility. Furthermore, during the SSI investigation in 1987, no documentation or evidence of wastes were observed. The site has been vacant since 1993, therefore, no potential worker exposure exists. There are no schools, residences, or daycare centers within 200 feet of the site. The population within 1-mile of the site is approximately 35,000 persons (E & E 1987). No terrestrial sensitive environments are known to exist within one mile of the site. There is no fencing or other security measures in place to prevent site access. The site is vacant, therefore, worker exposure is not a concern.

4.4 AIR MIGRATION PATHWAY

A release of hazardous substances to air is unlikely. No records regarding hazardous waste releases or complaints from residents have been documented. It is unknown if air emission controls were in place during the 20 years of North Shore Materials, Inc., operations. All exhaust from the PVC manufacturing process was filtered and the dust collected was recycled (E & E 1987).

5. SUMMARY

E & E has evaluated the North Shore Materials, Inc., site using existing files, various state information, and personal communication. This site operated as a manufacturer of PVC for coating of electrical wiring and cable from 1973 to 1993. The warehouse complex is currently vacant. During the past site investigations, no samples have been collected or analyzed for hazardous substances, because no documentation of hazardous substances, as described under CERCLA Section 101 (14), have been associated with the site.

The North Shore Materials, Inc., facility is located in an industrialized area of North Chicago. The population of approximately 85,000 persons within a 4-mile radius of the site obtain drinking water from Lake Michigan intakes, located approximately two miles northeast of the site (E & E 1987). The site is not located in a floodplain, and surface runoff would most likely drain into storm sewers. No records of complaints regarding the site are known to exist, and no sensitive environments that could potentially be affected by releases from the site are known to exist.

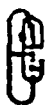
Based on the site history and previous investigations, it does not appear the North Shore Materials, Inc., site has released any hazardous substances to the groundwater, surface water, on-site soils, or air at any time during its 20 years of operation.

6. REFERENCES

- Davis, R., 1995, Coleman Cable Systems, Inc., North Chicago, Illinois, telephone conversation, contacted by Linda Knorz of E & E, Chicago, Illinois.
- Ecology and Environment, Inc. (E & E), August 8, 1980, *Preliminary Assessment for North Shore Materials, Inc., Chicago, Illinois.*
- _____, May 7, 1987, *Site Inspection Report For North Shore Materials, Inc., CERCLIS ID# ILD064006414, Chicago, Illinois.*
- Illinois Environmental Protection Agency (IEPA), April 29, 1986, *Preliminary Assessment Report for North Shore Materials, Inc., Springfield, Illinois.*
- Suter, et al, 1959, Preliminary Report, *Groundwater Resources at the Chicago Region, Illinois*, Cooperative Groundwater Report I, Illinois State Water Survey and Illinois State Geological Survey.
- Willman, H.B., *Summary of the Geology of the Chicago Area*, Circular 460, Illinois State Geological Survey, 1971.
- United States Geological Survey, 1960, 7.5 minute series topographical quadrangle, Waukegan, Illinois.

Note: References not provided with this report include documents which are currently available within the U.S. EPA files, copyrighted documents which are currently available in E & E's library, maps produced by either the United States Geologic Survey or the Illinois State Geologic Survey, and documents which are created by the various state agencies for public use.

APPENDIX A
REFERENCE DOCUMENTATION
NORTH SHORE MATERIALS, INC.



ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE

CONTACT

Red Davis

COMPANY or AGENCY

Coleman Cable Systems

POSITION

Manager

CONTACT ADDRESS

2500 Commonwealth Ave. Chicago North

CONTACT PHONE NUMBER

708 689-9090

E&E EMPLOYEE

Linda Knorz

DATE

6/20/95

TIME

1515

PROJECT NUMBER

ZT3051

SITE NAME and LOCATION

North Shore Materials Inc.

DISCUSSION

Mr. Davis stated that North Shore
Materials ceased operations in 1993 -
the warehouse is now empty, all equipment
used in the PVC manufacturing process
was sold.

SIGNATURE

Linda Knorz

PAGE

1

OF

1



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International Specialists in the Environment

September 29, 1995

8/4/95

Ms. Sonia Vega
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: North Shore Materials, Inc. site
North Chicago, Illinois
CERCLIS ID No.: ILD064006414
Focused Site Inspection Prioritization
Contract No.: 68-W0-0037
TDD No.: T05-9503-215

Dear Ms. Vega:

Enclosed are the final Focused Site Inspection Prioritization (FSIP) report and enclosures for the North Shore Materials, Inc. site, in North Chicago, Illinois. Draft copies of this report were submitted previously to you and to Mr. Tom Crause of the Illinois Environmental Protection Agency (IEPA).

The final FSIP is presented in two volumes. Volume 1 contains the Site Evaluation Report (SER). Volume 2 contains the United States Environmental Protection Agency Recommendation Form for the site as Enclosure 1, and a transmittal memorandum and Hazard Ranking System (HRS) scoresheets as Enclosure 2.

Should you have any questions, please call me at 312/663-9415.

Sincerely,

Linda Knorz
Ecology and Environment, Inc.

xc: Steve Skare, Ecology and Environment, Inc.
Tom Crause, IEPA